

REMARKS

This application has been reviewed in light of the Office Action mailed on February 9, 2005. Claims 1-25 are pending in the application, with Claims 1, 9 and 16 being in independent form. Claims 26-30 have been withdrawn from consideration.

By the present amendment, Claims 1, 9 and 16 have been amended. Adequate support for the amendments is provided in the specification and in the figures. No new matter or issues are believed to be introduced by the amendments.

In the Office Action, Claims 1-6, 8 and 10-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. US 2003/0062413 issued to Gardiner et al., (“Gardiner et al.”); Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Gardiner et al. in view of U.S. Patent No. 6,357,659 issued to Kelly et al. (“Kelly et al.”); Claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Gardiner et al. in view of U.S. Patent No. 6,223,988 issued to Batterman et al. (“Batterman et al.”); Claims 1-4, 8-9, 11-19 and 21-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Batterman et al.; and Claims 5-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Batterman et al. in view of Kelly et al.

Applicants have amended independent Claims 1 and 16 to better define Applicants’ invention and to patentably distinguish over the disclosures of the prior art of record.

It is Applicants’ belief that independent Claims 1 and 16 as presented patentably distinguish Applicants’ invention over the disclosures of the prior art of record, taken alone or in any proper combination. In particular, Applicants’ Claims 1 and 16 respectively recite a functionally different optical coding reading system and imaging engine than what is disclosed by the prior art of record, as emphasized by the portions underlined below. Hence, the subject

matter of Claims 1 and 16 is not deemed obvious over the disclosures of the prior art of record, taken alone or in any proper combination.

Applicants' Claim 1 recites:

An optical code reading system comprising:
an optical code reader having associated circuitry housed within a housing;
an imaging engine having at least one image sensor and configured and dimensioned to fit within a predetermined form factor of the optical code reader;
an interface for interfacing said imaging engine with said circuitry housed within said housing of said optical code reader;
a first illumination assembly including at least one illuminating device for illuminating an optical target during a first illuminating period; and
a second illumination assembly including at least one illuminating device for illuminating said optical target during a second illuminating period, at least one of the first and second illumination assemblies is located externally and at a distance from said housing and communicates with said circuitry of said optical code reader. (Emphasis Added)

Applicants' Claim 16 recites:

An imaging engine configured and dimensioned to fit within a predetermined form factor of an optical code reader, said imaging engine comprising:
an imaging assembly including at least one image sensor;
an interface for interfacing said imaging assembly with circuitry of said optical code reader when provided within said predetermined form factor of said optical code reader;
a first illumination assembly including at least one illuminating device for illuminating an optical target during a first illuminating period; and
a second illumination assembly including at least one illuminating device for illuminating said optical target during a second illuminating period, said first and second illumination assemblies respectively emit a first and a second output beam for illuminating said optical target, synchronization of said output beams being controlled by said circuitry of said optical code reader. (Emphasis Added)

The prior art of record, taken alone or in any proper combination, does not disclose or suggest at least the emphasized limitations of Claims 1 and 16. Gardiner et al. is directed to an optical reader having an imaging module having at least one multiple color emitting light source provided thereon. The light source includes a plurality of different colored LED dies each independently driveable so that the overall color emitted by the light source can be controlled and varied. The multiple color emitting light source can be controlled so that the color emitted by the

light source is optimized for imaging or reading. The imaging module can be configured so that control of the multiple color emitting light source automatically varies depending on a sensed condition, the distance of the module to a target, and/or a predetermined criteria being met so that feedback is provided to a user. Batterman et al. is directed to a laser scanning module and a two dimensional image sensor.

Neither Gardiner et al. nor Batterman et al. disclose or suggest the newly added limitations to Applicants' Claims 1 and 16. In particular, neither Gardiner et al. nor Batterman et al. disclose or suggest "at least one of the first and second illumination assemblies is located externally and at a distance from said housing and communicates with said circuitry of said optical code reader," as recited by Applicants' Claim 1. That is, neither Gardiner et al. nor Batterman et al. disclose or suggest an illuminating device, let alone, an illumination assembly, located externally and at a distance from a housing of an optical code reader.

Further, neither Gardiner et al. nor Batterman et al. disclose or suggest "said first and second illumination assemblies respectively emit a first and a second output beam for illuminating said optical target, synchronization of said output beams being controlled by said circuitry of said optical code reader," as recited by Applicants' Claim 16. That is, neither Gardiner et al. nor Batterman et al. disclose or suggest circuitry for controlling the synchronization of emitted light beams; wherein synchronization is defined as coordination with respect to time (see <http://en.wikipedia.org/wiki/Synchronize>). In fact, the word "synchronization" and/or derivatives thereof are not used by either reference in describing the emitted light.

Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) with respect to Claims 1 and 16 and allowance of thereof are respectfully requested. Dependent Claims 2-15 and 17-25

depend from Claims 1 and 16, respectively, and therefore include the limitations of Claims 1 and 16. Accordingly, for at least the same reasons given for Claims 1 and 16, Claims 2-15 and 17-25 are believed to contain patentable subject matter. Accordingly, withdrawal of the rejections under 35 U.S.C. §103(a) with respect to Claims 2-15 and 17-25 and allowance thereof are respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application and not withdrawn, namely, Claims 1-25, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicants' undersigned attorney at (631) 501-5700.

Respectfully submitted,



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